"BECCA" BILL PROGRAM EVALUATION: YOUTH RESIDENTIAL CHEMICAL DEPENDENCY TREATMENT PROGRAMS

SECOND ANNUAL REPORT

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"BECCA" BILL PROGRAM EVALUATION: SECOND ANNUAL REPORT

BACKGROUND

This report is the second of two annual program evaluations of youth residential treatment programs required by the 1995 passage of the Runaway/At Risk Youth Act, known as the "Becca" Bill. This evaluation reports on six residential treatment agencies that had admitted youth under the provisions of the "Becca" Bill by April 1997. The Division of Alcohol and Drug Abuse (DASA) has defined "Becca" admissions as those meeting at least one of the following criteria:

- Youth admitted to residential treatment under an At-Risk Youth (ARY) or Children in Need of Services Petition (CHINS);
- Youth referred to residential treatment under the involuntary treatment commitment regulations (RCW 70.96A.140);
- Voluntary parent admission of a non-consenting youth; and/or
- Youth referred to treatment through a truancy petition.

Throughout this report, "Becca youth/admission" refers to a youth/admission meeting at least one of these four criteria.

Of the six agencies evaluated, two provided Level I services (Youth *Basic* Residential Treatment) and four provided Level II services (Youth *Intensive* Residential Treatment). Level II programs provide more intensive treatment than Level I programs and are designed to serve youth who are chemically dependent and have mental health diagnoses that require concurrent management, have serious family dysfunction, serious behavioral problems, or are at high risk for not completing treatment. Most of the study findings are presented separately by level of treatment and – in appendix form – by specific agency.

Evaluation Questions

This program evaluation used data from TARGET, DASA's management information system, to address the following questions:

1. What are the demographic characteristics of youth admitted to agencies that accept "Becca" admissions?
2. What percentage of youth admitted to these agencies actually complete treatment?
3. What is the typical length of time in treatment for youth admitted to these agencies?
   - How does length of treatment differ for youth completing their treatment versus those not completing treatment?
4. What percentage of these youth subsequently obtain additional chemical dependency treatment?
   - What types of additional treatment?
   - Are these patterns different for youth completing their treatment versus those not completing treatment?

How do youth in Level I and Level II agencies differ across each of these dimensions?

Groups Studied

This evaluation provides findings based on two groups of youth recently admitted to publicly-funded treatment. Basic information (client and treatment characteristics) is provided on a relatively large population of youth who received publicly-funded treatment at six agencies that have accepted "Becca" admissions (see Group #1 below).

Group #1: Population of essentially all youth admitted to (and discharged from) publicly-funded treatment in any of the six study agencies that accepted "Becca" admissions between July 1995 and mid-April 1997 (regardless of whether the particular treatment was under the provisions of the "Becca" Bill). This population numbered 1290 youth, 587 of whom received Level I treatment while the remaining 703 received Level II treatment. Throughout this report this group will be referred to as the "larger study population."

As part of this evaluation, we wanted to include findings on subsequent treatment received by these youth. However, data on treatment histories among this large population of youth were not available in time for this report. Instead, we obtained such data on a smaller sample of 185 youth in order to provide findings on subsequent treatment (Group #2).

Group #2: Sample of 185 youth admitted to publicly-funded treatment in those same six agencies between mid-June 1996 and the end of 1996 and recruited for the outcome evaluation of this project. This is a subsample of Group #1. Level I treatment was received by 54 of these youth; the other 131 received Level II treatment. Throughout this report this group will be referred to as the "recruited sample."

It should be noted that this is an evaluation of treatment agencies that have accepted "Becca" admissions as part of their clientele and that the two groups described here contain both "Becca" youth and "non-Becca" youth.

RESULTS

The main findings of the evaluation were as follows.

Client Characteristics

- Demographic characteristics for youth in the larger study population were similar in Level I and Level II agencies.
  - Ages ranged from 11 to 17, with a median age of 15, in both treatment levels.
  - Approximately 44% were female in both levels.
  - About three-fourths in both levels were non-Hispanic white, 3% were African-American, about 10% were Native American/Alaskan Native, about 9% were Hispanic, and about 2% or less were Asian/Pacific Islander.

Comparison of Completion Rates Across Treatment Level

- Approximately 53% of youth in the larger study population completed treatment.
- Level I agencies had higher treatment completion rates than Level II agencies (65% vs. 43%, respectively). This is not surprising, for several reasons: (1) Level II treatment is typically longer; (2) youth in Level II agencies tend to have more troubled backgrounds; and (3) youth who are judged to be at higher risk of not completing treatment tend to be referred to Level II agencies.
- Almost one-quarter (23%) of youth in Level I agencies were discharged with provider advice, compared with 5% in Level II agencies.
- Close to one-quarter (22%) of youth in Level II agencies were discharged due to a rule-violation or non-compliance, compared with only 1% of Level I youth.
- An analysis of youth in the recruited sample produced almost identical results.

Comparison of Treatment Time Across Treatment Level and Completion Status

- Youth in Level II treatment tended to spend more time in treatment,[1] especially when considering for the fact that they were less likely to complete their treatment.
  - Among those in the larger study population, Level I youth were in treatment an average (mean) period of 24 days, compared with an average of 35 days among Level II youth. This difference is due primarily to the fact that a portion of Level II youth remained in treatment for particularly lengthy periods: just over one-third (35%) of Level II youth were in treatment for over 45 days, compared with fewer than 1% of Level I youth.
  - An analysis of youth in the recruited sample produced almost identical results to those of the larger study population.

Subsequent Treatment

Most youth entering residential treatment have multiple needs and a level of dysfunction that cannot be addressed entirely through a single brief episode of treatment. Ideally, a continuum of care would be provided, whereby residential treatment would be followed by outpatient or recovery house services. Our analysis of subsequent treatment of youth in the recruited sample was intended to reveal patterns in their attempts to obtain a continuum of appropriate treatment.

- Youth in Level I programs were more likely to obtain subsequent treatment, to have more subsequent admissions, and obtain subsequent treatment more quickly, than Level II youth.
  - Among youth in the recruited sample, 72% of Level I youth had subsequent treatment admissions, compared with 45% of Level II youth.
  - There were approximately 12 subsequent admissions per 10 clients among Level I youth, compared with about 7 subsequent admissions per 10 clients among Level II youth.

[1] We computed two types of averages for time in treatment. The *mean*, or arithmetical average, is computed as the sum of the values divided by the number of cases. The *median* is the value at which half the cases' values fall above and half fall below.

- Among youth who did obtain subsequent treatment, the average (mean) time between discharge and the immediate subsequent admission was 16 days among Level I youth and 32 days among Level II youth.

Further examination of the data suggests that the tendency for Level I youth to have more subsequent treatment is due in part to the fact that Level I youth were more likely to complete their treatment, and perhaps were thus more inclined to continue treatment designed to augment their recovery (e.g., outpatient or recovery house services).

- Youth who completed treatment were more likely to obtain subsequent treatment than youth who did not complete treatment. This was especially true for services that tend to provide a continuum of care following inpatient treatment.
  - Among youth in the recruited sample, almost two-thirds (65%) of those who completed treatment had subsequent admissions, compared with 43% of non-completers.
  - Almost two-thirds (63%) of the youth who completed treatment had subsequent treatment in outpatient or recovery house settings, compared with 31% of non-completers.
  - Very few (4%) of the youth who completed treatment had subsequent treatment in intensive inpatient settings, compared with 23% of non-completers.
  - Consistent with the concept of continuum of care, almost all (97%) of the youth who completed treatment and had subsequent treatment received outpatient or recovery house services as part of their subsequent treatment; 92% received subsequent treatment consisting *solely* of outpatient and/or recovery house services.

"BECCA" BILL PROGRAM EVALUATION: SECOND ANNUAL REPORT

INTRODUCTION

This report is the second of two annual program evaluations of youth residential treatment programs required by the 1995 passage of the Runaway/At Risk Youth Act, known as the "Becca" Bill (for results of the first evaluation, see Baxter and Peterson, 1996). This evaluation reports on the six residential treatment agencies that had admitted youth under the provisions of the "Becca" Bill by April 1997.

This report was prepared to meet a legislative requirement. The Division of Alcohol and Substance Abuse (DASA) contracted with the Alcohol and Drug Abuse Institute (ADAI) at the University of Washington to evaluate the treatment programs. Similar to the previous evaluation this current report provides information on client and treatment characteristics for youth admitted to (and discharged from) to publicly-funded treatment in any of these six agencies between July 1, 1995 and mid-April 1997 (regardless of whether the particular treatment was under the provisions of the "Becca" Bill). The report also provides an evaluation of treatment completion, length of time in treatment, and subsequent treatment received by a subset of recruited publicly-funded youth admitted to those same agencies between mid-June 1996 and December 31, 1996.

Agencies Studied

This evaluation reports on six residential treatment agencies that had admitted youth under the provisions of the "Becca" Bill by April 1997. DASA has defined "Becca" admissions as those meeting at least one of the following criteria:

- Youth admitted to residential treatment under an At-Risk Youth (ARY) or Children in Need of Services Petition (CHINS);
- Youth referred to residential treatment under the involuntary treatment commitment regulations (RCW 70.96A.140);
- Voluntary parent admission of a non-consenting youth; and/or
- Youth referred to treatment through a truancy petition.

Throughout this report, "Becca youth/admission" refers to a youth/admission meeting at least one of these four criteria.

All six of the programs evaluated are DASA-certified youth chemical dependency treatment programs. (In this report, the corresponding agencies are identified only though coded labels; e.g., "Agency I-A.") Counties represented are King (two agencies), Skagit, Spokane, Thurston, and Yakima (one agency each). A seventh program had received "Becca" admissions but had not submitted the appropriate clients information to TARGET, and thus has been excluded from this report.

Level I and Level II Treatment

Two levels of adolescent chemical dependency treatment are currently provided in Washington State: Level I (Youth *Basic* Resident Treatment) and Level II (Youth *Intensive* Residential Treatment). Of the six agencies in the study, two provided Level I services and four provided Level II services. (During the study period, there were six Level I and six Level II youth treatment agencies in Washington state, thus only half of the residential treatment agencies reported having admitted "Becca" youth.)[3]

As described below, Level II programs provide more intensive treatment than Level I programs and are designed to serve youth who are chemically dependent and have mental health diagnoses that require concurrent management, have serious family dysfunction, serious behavioral problems, or are at high risk for not completing treatment. Because Level I and Level II treatment agencies are designed to serve youth with different needs, and because the programs are designed with different levels of program length and intensity, the results of our analysis will usually be presented separately by level of treatment and – in appendix form – by specific agency.

Youth appropriate for Level I treatment are youth with cognitive development of at least 11 years of age, who have a primary diagnosis of chemical dependency, and require less clinical supervision and behavior management than Level II youth. Generally speaking, youth participants in Level I do not require intensive therapeutic intervention for other disorders, such as mental disorders or aggressive behavior, as part of primary chemical dependency treatment. Length of Level I treatment is typically between 21 and 28 days, with a maximum stay of 60 days.

Level II treatment is more intensive treatment and serves youth who meet criteria for being chemically dependent and at least one of the following conditions:

1) Have symptoms of a mental health diagnosis (or potential diagnosis) requiring concurrent management with the treatment of addiction (e.g., attention deficit-hyperactivity disorder, depression, conduct disorder, etc.);
2) Have extreme family dysfunction;
3) Have experienced prior trauma due to emotional, physical or sexual abuse;
4) May present a major risk of danger to the client or others; and/or
5) Are at high risk not to complete treatment.

[3] In some instances, youth who are referred for "Becca" treatment are denied admission by the agency, for various reasons (e.g., the agency is unable to meet the specific clinical needs of the youth or the youth needs a lower or higher level of treatment). Agencies are required to notify DASA when such a denial occurs; to date, DASA has received notification of seven such cases. Six of the youth were under an ARY petition and one was under a CHINS petition. Two of the youth approached outpatient treatment programs; one of these youth was referred to inpatient treatment (although the youth was not admitted), and the other was referred to inpatient psychiatric services. The other five youth approached inpatient treatment agencies; two of these youth were denied admission because of behavioral non-compliance, while another failed to meet dependence criteria. A fourth youth left against medical advice and the parents of a fifth youth decided against treatment.

Length of Level II treatment is more variable, and usually longer, than Level I treatment. The expected range varies across programs, anywhere from 14 to 90 days, with a maximum stay up to 120 days. Level II programs are required to provide chemical dependency counseling staff trained in areas other than chemical dependency, such as developmental issues, abuse, anger, aggression, and behavior management. They are also required to provide a mental health specialist, and some form of staff or physical security for youth who are at risk to leave treatment against clinical advice. At this time only one Level II program is a locked (male-only) facility.

With this report we have attempted to provide a reasonable evaluation of agencies that have admitted youth under the provisions of the "Becca" Bill. However, it is important to note that all results in the report are based on data that contain both "Becca" admissions (youth admitted under the "Becca" criteria) and non-"Becca" admissions.

Data Source

Findings in this report are based on analysis of data reported by the treatment agencies to TARGET, DASA's management information system. The TARGET system compiles data (at treatment assessment, admission and discharge) on all publicly-funded clients in Washington State, including information on their demographic characteristics, alcohol/drug use, lifestyle, utilization of medical services, and criminal arrest history. TARGET data were provided to ADAI by DASA in unidentified format (names and other unique client identifiers were excluded) for analysis. Case information (including subsequent treatment episodes) was matched using Personal Identification Codes (PICs)[4] supplied by DASA.

Evaluation Questions

This program evaluation addressed the following primary questions:

1. What are the demographic characteristics of youth admitted to agencies that accept "Becca" admissions?
2. What percentage of youth admitted to these agencies actually complete treatment?
3. What is the typical length of time in treatment for youth admitted to these agencies?
   - How does length of treatment differ for youth completing their treatment versus those not completing treatment?
4. What percentage of these youth subsequently obtain additional chemical dependency treatment?
   - What types of additional treatment?
   - Are these patterns different for youth completing their treatment versus those not completing treatment?

How do youth in Level I and Level II agencies differ across each of these dimensions?

[4] Each 14-digit PIC consists of the following: First five letters of the client's last name, first initial, middle initial, six digit date of birth, and one-digit computer-generated "tie-breaker" number.

Groups Studied

In addressing the evaluation questions, we used data on two different gr
study population for the first three evaluation questions (pertaining to clie
characteristics) consisted of essentially all youth admitted over a period
agencies that have accepted "Becca" admissions. Findings are presente
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We also used data on a second, smaller group of youth recruited from th
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Groups Studied

In addressing the evaluation questions, we used data on two different groups of youth. Our study population for the first three evaluation questions (pertaining to client and treatment characteristics) consisted of essentially all youth admitted over a period of nearly two years to agencies that have accepted "Becca" admissions. Findings are presented in Section I of the report.

We also used data on a second, smaller group of youth recruited from the same set of agencies to provide findings not only on client and treatment characteristics, but also on subsequent treatment received by the youth. These findings are presented in Section II.

SECTION I: EVALUATION OF CLIENT/TREATMENT CHARACTERISTICS

Study Population

As noted above, our study population for the first three evaluation questions (pertaining to client and treatment characteristics) consisted of essentially all youth admitted over a period of nearly two years to all agencies that have accepted "Becca" admissions. This population consisted of 1290 youth who met all of the following criteria:

1) received inpatient substance abuse treatment at one of the six treatment agencies who admitted youth under the provisions of the "Becca" Bill;
2) received at least some public funding for their treatment;
3) were under the age of 18 at admission;
4) were admitted to, and discharged from, treatment between July 1, 1995 and mid-April 1997[5];
5) had discharge data entered in the TARGET database by April 28, 1997; and
6) were discharged for reasons other than inappropriate admission (n=11) and death (n=1).

It should be noted that this is an evaluation of treatment agencies that have accepted "Becca" admissions as part of their clientele and that this population contains both "Becca" youth and "non-Becca" youth.

The distribution of the 1290 cases across agencies was as follows (with percentages of the overall population):

Level I Agencies	587 (45.5%)	Level II Agencies	703 (54.5%)
• Agency I-A	185 (14.3%)	• Agency II-A	215 (16.7%)
• Agency I-B	402 (31.2%)	• Agency II-B	207 (16.0%)
		• Agency II-C	104 (8.1%)
		• Agency II-D	177 (13.7%)

[5] The actual admission dates ranged from 7/2/95 to 3/24/97, while discharge dates ranged from 7/6/95 to 4/15/97.

RESULTS

Characteristics of Youth Admitted to Treatment

Table 1 presents the distribution of client characteristics by treatment level (Table B-1, in Appendix B, provides such findings by treatment agency).

Demographic characteristics for youth in Level I and Level II agencies were similar.

- Ages ranged from 11 to 17, with a median age of 15.
- 45% of youth in Level I agencies and 42% in Level II agencies were female.
- About three-fourths of the youth in both treatment levels were non-Hispanic white, 3% were African-American, about 10% were Native American/Alaskan Native, about 9% were Hispanic, and about 2% or less were Asian/Pacific Islander.

Table 1. Demographic Characteristics Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level)

CHARACTERISTIC	Level I Agencies (n=587)	Level II Agencies (n=703)
Age		
• Mean	15.2	15.3
• Median	15	15
• Range	11 - 17	11 - 17
Gender		
• Female	264 (45.0%)	293 (41.7%)
• Male	323 (55.0%)	410 (58.3%)
Race/Ethnicity		
• White, not Hispanic	439 (74.8%)	513 (73.0%)
• African-American/Black, not Hispanic	19 (3.2%)	23 (3.3%)
• Native American / Alaskan Native	64 (10.9%)	72 (10.2%)
• Hispanic	55 (9.4%)	68 (9.7%)
• Asian / Pacific Islander	3 (0.5%)	15 (2.1%) **
• Other race	6 (1.0%)	7 (1.0%)
• Unknown / Refused to answer	1 (0.2%)	5 (0.7%)

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

Treatment Completion

Table 2 (p. 7) presents information on type of treatment discharge (including treatment completion) of the youth, by treatment level (Table B-2, in Appendix B, provides such findings by treatment agency).

- Level I agencies had higher treatment completion rates than Level II agencies. This is not surprising given the more troubled backgrounds of youth in Level II agencies and the fact that youth who are judged to be at higher risk of not completing treatment tend to be referred to Level II agencies.
  - Approximately 65% of youth in Level I agencies and 43% in Level II agencies completed treatment (statistically-significant difference at $p < .001$[6]). However, there were also differences in completion rates among agencies with the same treatment level. Completion rates for the two Level I agencies were dissimilar (58% and 81%), while Level II agency completion rates ranged from 28% to 60% (Table B-2 in Appendix B).
  - Almost one-quarter (23%) of youth in Level I agencies were discharged with provider advice, compared with 5% in Level II agencies ($p < .001$).
  - Almost 20% of youth in Level II agencies left against the advice of their treatment provider, compared with 11% of youth in Level I agencies ($p < .001$).
  - Close to one-quarter (22%) of youth in Level II agencies were discharged due to a rule-violation or non-compliance, compared with only 1% of Level I youth ($p < .001$). Chart reviews by DASA have indicated that such infractions frequently involve patterns of serious rule violations that might have resulted in a serious health or safety risk including violence or threats of violence. For example, a chart review of the treatment discharge records of 23 "Becca" youth with this type of discharge revealed that 22% of the cases involved violence and another 9% involved property destruction.

Table 2. Discharge Type Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level)

DISCHARGE TYPE	Level I Agencies (n=587)	Level II Agencies (n=703)
Discharge Type		
• Completed treatment	382 (65.1%)	300 (42.7%) ***
• Withdrew with provider advice	135 (23.0%)	38 (5.4%) ***
• Withdrew against provider advice	64 (10.9%)	140 (19.9%) ***
• Rule violation / Non-compliance	3 (0.5%)	155 (22.0%) ***
• No contact / Treatment aborted	0 (0.0%)	37 (5.3%) ***
• Incarcerated	0 (0.0%)	24 (3.4%) ***
• Transferred to different provider	3 (0.5%)	8 (1.1%)
• Other (unspecified)	0 (0.0%)	1 (0.1%)

Statistical Significance of Differences Between Treatment Levels:
* = $p < .05$ ** = $p < .01$ *** = $p < .001$

[6] Statistical significance will be reported for differences between treatment levels. For example, a statistically-significant difference at $p < .001$ indicates that the probability that the difference between the two comparison groups (Level I and Level II) is actually zero is less than 1 in 1000.

Length of Time in Treatment

Table 3a presents information on length of time in treatment by treatment level (Table B-3a, in Appendix B, provides such findings by treatment agency).

- Youth in Level II treatment tended to spend more time in treatment.[7] The average (mean) length of time in treatment in Level I programs was 24 days, compared with 35 days in Level II programs ($p < .001$). However, the median length of time was about the same in the two treatment levels (28 days in Level I vs. 29 days in Level II). This discrepancy is due primarily to the fact that a portion of Level II youth remained in treatment for particularly lengthy periods: just over one-third (35%) of Level II youth were in treatment for over 45 days, compared with fewer than 1% of Level I youth.

Table 3a. Length of Time in Treatment Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level)

All Youth

TIME IN TREATMENT	Level I Agencies (n=587)	Level II Agencies (n=703)
Time in Treatment (# Days)		
• Mean	23.9	34.5 ***
• Median	28	29
• Range	1 - 58	1 - 119
Distribution of Length of Tx		
• 1 - 15 days	152 (25.9%)	207 (29.4%)
• 16 - 30 days	274 (46.7%)	167 (23.8%)
• 31 - 45 days	156 (26.6%)	80 (11.4%)
• 46 - 60 days	5 (0.9%)	117 (16.6%)
• 61 or more days	0 (0.0%)	132 (18.8%)

Statistical Significance of Differences Between Treatment Levels (means only):
* = $p < .05$ ** = $p < .01$ *** = $p < .001$

[7] We computed two types of averages for time in treatment. The *mean*, or arithmetical average, is computed as the sum of the values divided by the number of cases. The *median* is the value at which half the cases' values fall above and half fall below.

It is notable that although Level II treatment is designed to be longer than Level I treatment, the typical (median) time in treatment did not differ across treatment level. However, this is explained by several factors, most notably a disparity in completion rates across treatment level (#3):

1. These differences (across treatment level) in length of treatment time would be more pronounced if not for one Level II program that had relatively short treatment times (with a mean treatment time of 16 days) (Table B-3b in Appendix B).
2. The findings regarding mean and median times suggest that a small portion of Level II youth had particularly lengthy treatment stays. Closer inspection of the data supports this interpretation: while 99% of the Level I youth had treatment stays of 43 days or less (with the longest treatment stay being 58 days), a sizable portion (28%) of youth in Level II programs had stays of at least 58 days.
3. Most notably, youth in Level II treatment were less likely to complete treatment (i.e., to remain for the full scheduled tenure of their treatment) than were their Level I counterparts. The effects of this disparity in completion status on time spent in treatment can be seen in the following set of findings.

Table 3b (p. 10) presents findings (based again on the larger study population) on time in treatment by treatment level, *controlling for completion status* (Table B-3b, in Appendix B, provides such findings by treatment agency).

- Controlling for completion status, youth in Level II treatment tended to be in treatment substantially longer than Level I youth, in both average (mean) time and typical (median) time.
  - Among youth completing treatment, the average (mean) length of time in treatment for Level I completers was 32 days, compared with 52 days for Level II completers ($p < .001$). Median times also showed a difference: 28 days for Level I completers and 59 days for Level II completers.
  - Similarly, for youth not completing treatment, Level I non-completers spent 10 days in treatment, compared with 22 days for Level II non-completers ($p < .001$). Median times also revealed a difference: 7 days for Level I non-completers and 17 days for Level II non-completers. Notably, over one-quarter (27%) of Level II non-completers spent more than 30 days in treatment.

Table 3b. Length of Time in Treatment Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level and Completion Status)

Treatment Completers

TIME IN TREATMENT	Level I Agencies (n=382)	Level II Agencies (n=300)
Time in Tx (# Days) Among Youth Completing Tx		
• Mean	31.5	51.5 ***
• Median	28	59
• Range	12 - 58	4 - 102
Distribution of Length of Tx		
• 1 - 15 days	1 (0.3%)	15 (5.0%)
• 16 - 30 days	225 (58.9%)	63 (21.0%)
• 31 - 45 days	151 (39.5%)	18 (6.0%)
• 46 - 60 days	5 (1.3%)	88 (29.3%)
• 61 or more days	0 (0.0%)	116 (38.7%)

Treatment Non-completers

TIME IN TREATMENT	Level I Agencies (n=205)	Level II Agencies (n=403)
Time in Tx (# Days) Among Youth Not Completing Tx		
• Mean	9.5	21.8 ***
• Median	7	17
• Range	1 - 39	1 - 119
Distribution of Length of Tx		
• 1 - 15 days	151 (74.0%)	192 (47.9%)
• 16 - 30 days	49 (23.9%)	104 (25.9%)
• 31 - 45 days	5 (2.5%)	62 (15.4%)
• 46 - 60 days	0 (0.0%)	29 (7.2%)
• 61 or more days	0 (0.0%)	16 (4.0%)

Statistical Significance of Differences Between Treatment Levels (means only):
* = p <.05 ** = p <.01 *** = p <.001

SECTION II: EVALUATION OF SUBSEQUENT TREATMENT

Study Sample

To address the fourth evaluation question (concerning subsequent treatment) requires that the data be structured based on client treatment history. We were unable to obtain the data in this format for the entire population of 1290 youth in time for this report. However, we did have data structured in this format for a sample of youth from an outcome evaluation we were preparing concurrently for DASA (Peterson et al., 1997). This sample constituted a subsample of the population of youth described in Section I.

This sample was drawn from a pool of 287 publicly-funded youth recruited for the outcome evaluation, based on meeting all of the following criteria:

1) received inpatient substance abuse treatment at one of the six treatment agencies who admitted youth under the provisions of the "Becca" Bill;
2) received at least some public funding for their treatment;
3) were under the age of 18 at admission;
4) were admitted to treatment between mid-June 1996 and December 31, 1996;
5) had admission data entered in the TARGET database by May 1, 1997; and
6) agreed (along with their parents) to participate in at least some part of the study and consented to release to researchers TARGET information regarding their treatment.

Staff at the six study agencies approached the youth (and their parents) upon intake for admission, to describe the study and request their participation (i.e., to be interviewed and allow release of TARGET information). Of the 287 publicly-funded youth and their parents, 96 declined to participate or refused to consent to release their TARGET data. Of the 191 youth agreeing to participate fully, six were excluded from the program analysis due to our inability to locate (as of May 1, 1997) the TARGET data pertaining to their treatment admission. These procedures resulted in 185 cases for analysis of subsequent treatment as part of this program evaluation.

It should be noted that this is an evaluation of treatment agencies that have accepted "Becca" admissions as part of their clientele and that this sample contains both "Becca" youth and "non-Becca" youth.

The distribution of the 185 cases across agencies was as follows (with percentages of overall sample):

Level I Agencies	54 (29.2%)	Level II Agencies	131 (70.8%)
• Agency I-A	7 (3.8%)	• Agency II-A	35 (18.9%)
• Agency I-B	47 (25.4%)	• Agency II-B	36 (19.5%)
		• Agency II-C	28 (15.1%)
		• Agency II-D	32 (17.3%)

It can be noted that Level I agencies are underrepresented in this sample (where they provide 29% of the cases), when compared with their portion of the larger study population used in Section I (46% of the cases).

Measurement of Subsequent Treatment

Information on all treatment admissions for the youth in the recruited sample was extracted from the TARGET database by DASA personnel and provided to study staff. "Subsequent admissions" consisted of all treatment admissions occurring subsequent to the study admission and for which admission data were entered in the TARGET database by May 1, 1997.

Our primary task in measuring subsequent treatment was to provide as complete a record of such treatment as possible; intergroup comparisons (e.g., Level I youth vs. Level II youth) were of only secondary interest. Accordingly, we chose to maximize our information on subsequent treatment by counting all such admissions contained in the TARGET dataset up to the date on which we received the data. Consequently, the "window" periods of time in which subsequent admissions (and their entry into TARGET) were possible varied across youth, depending on the youth's discharge date. However, it is notable that the average (mean) window periods turned out to be remarkably similar across treatment level: Level I youth had an average window period of 196 days, while Level II youth had an average window period of 197 days. Furthermore, almost all of the youth had a reasonable gap of time in which to be re-admitted to treatment: all (100%) of the Level I youth, and nearly all (96%) of the Level II youth had window periods of at least 90 days.

For the purposes of analysis, subsequent admissions were categorized into five treatment modalities: intensive inpatient, outpatient, recovery house, group care, and detox (see Appendix A for descriptions of these forms of youth treatment).

RESULTS

Treatment Completion

Table 4 (p. 13) presents information on type of treatment discharge (including treatment completion) by treatment level (Table B-4, in Appendix B, provides such findings by treatment agency).

- As with the larger study population discussed in Section I, Level I programs had higher treatment completion rates than Level II programs.
  - Approximately 65% of youth in Level I programs and 45% in Level II programs completed treatment ($p < .05$). There were also differences in completion rates within treatment levels, especially Level II. While the completion rates for the two Level I programs were similar (57% and 66%), Level II program completion rates ranged from 32% to 58% (Table B-4 in Appendix B).
  - Approximately 22% of youth in Level I programs were discharged *with* provider advice, compared with 8% in Level II programs ($p < .05$).
  - Almost one-quarter (23%) of youth in Level II programs were discharged due to a rule-violation or non-compliance, compared with none of the Level I youth ($p < .001$).

Table 4. Discharge Type Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Treatment Level)

DISCHARGE TYPE	Level I Agencies (n=54)	Level II Agencies (n=125)
Discharge Type		
• Completed treatment	35 (64.8%)	56 (44.8%) *
• Withdrew with provider advice	12 (22.2%)	10 (8.0%) *
• Withdrew against provider advice	7 (13.0%)	22 (17.6%)
• Rule violation / Non-compliance	0 (0.0%)	29 (23.2%) ***
• No contact / Treatment aborted	0 (0.0%)	3 (2.4%)
• Incarcerated	0 (0.0%)	4 (3.2%) *
• Transferred to different provider	0 (0.0%)	0 (0.0%)
• Inappropriate admission	0 (0.0%)	1 (0.8%)
• Other (unspecified)	0 (0.0%)	0 (0.0%)
Admissions without Discharge as of Data Cutoff Date (5/1/97)	0	6

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

Length of Time in Treatment

An analysis of the length of time spent in treatment by this recruited sample of youth produced almost identical results to those based on the larger study population in Section I (Table B-5, in Appendix B, provides such findings by treatment level, agency and completion status).

- Among those in the recruited sample, Level II youth tended to spend longer time in treatment (in terms of mean times, but not median times), and spent longer time in treatment (in terms of mean and median times) when controlling for completion status.
  - The average (mean) length of time in treatment in Level I programs was 22 days, compared with 37 days in Level I programs (p <.001). However, the median length of time was about the same in the two treatment levels (28 days in Level I vs. 26 days in Level II).
- Controlling for completion status, youth in Level II treatment tended to be in treatment substantially longer than Level I youth, in both average (mean) time and typical (median) time.
  - Among those in the recruited sample, the average (mean) length of time in treatment for youth who completed treatment was 29 days for Level I youth, compared with 54 days for Level II youth (p <.001). Median times also showed a difference: 28 days for Level I youth and 60.5 days for Level II youth.
  - Similarly, for youth not completing treatment, Level I youth spent 9 days in treatment, compared with 24 days for Level II youth (p <.001). Median times also revealed a difference: 7 days for Level I youth and 19 days for Level II youth.
  - As noted earlier, even among non-completers, over one-quarter (27%) of Level II youth spent more than 30 days in treatment (see Table 3b).

Subsequent Treatment

Most youth entering residential treatment have multiple needs and a level of dysfunction that cannot be addressed entirely through a single brief episode of treatment. Ideally, a continuum of care would be provided, whereby residential treatment would be followed by outpatient or recovery house services. Our analysis of subsequent treatment of youth in the recruited sample was intended to reveal patterns in their attempts to obtain a continuum of care.

Figure 1 (p. 15) summarizes information on subsequent treatment admissions by treatment level[8] (Figure B-1, in Appendix B, provides such findings by treatment agency).

- Youth in Level I programs were more likely to have subsequent admissions than Level II youth.
  - Almost three-quarters (72%) of Level I youth had a subsequent admission, compared with 45% of Level II youth ($p < .001$).
- There was wide disparity across agencies in the percentage of youth with subsequent treatment admissions.
  - The percentage of youth with subsequent treatment ranged from 14% in Agency I-A to 81% in Agency I-B (Figure B-1 in Appendix B).

Figure 2 (p. 15) summarizes information on subsequent treatment admissions by treatment level and the modality of the subsequent treatment (Figure B-2, in Appendix B, provides such findings by treatment agency).

- Outpatient treatment was the most common type of subsequent treatment.
  - At both treatment levels, the most common type of subsequent treatment was outpatient treatment (57% of Level I youth, and 27% of Level II youth, obtained subsequent outpatient treatment).
  - For every agency, the most common type of subsequent treatment was outpatient treatment (although for two agencies, other forms – such as intensive inpatient and recovery house -- were equally common) (Figure B-2 in Appendix B).
- Youth in Level I programs were more likely than Level II youth to obtain subsequent treatment congruous with the concept of continuum of care (e.g., outpatient or recovery house services).
  - Over half (57%) of Level I youth obtained subsequent outpatient treatment, compared with just over one-quarter (27%) of Level II youth ($p < .001$).
  - A sizable majority (70%) of Level I youth obtained subsequent outpatient or recovery house treatment, compared with just over one-third (36%) of Level II youth (not shown in figure) ($p < .001$).

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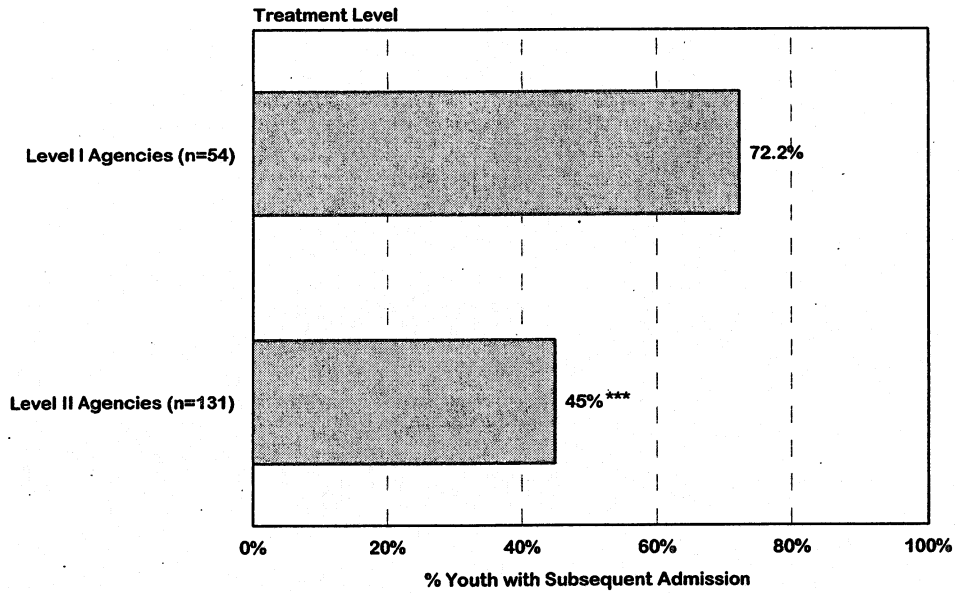
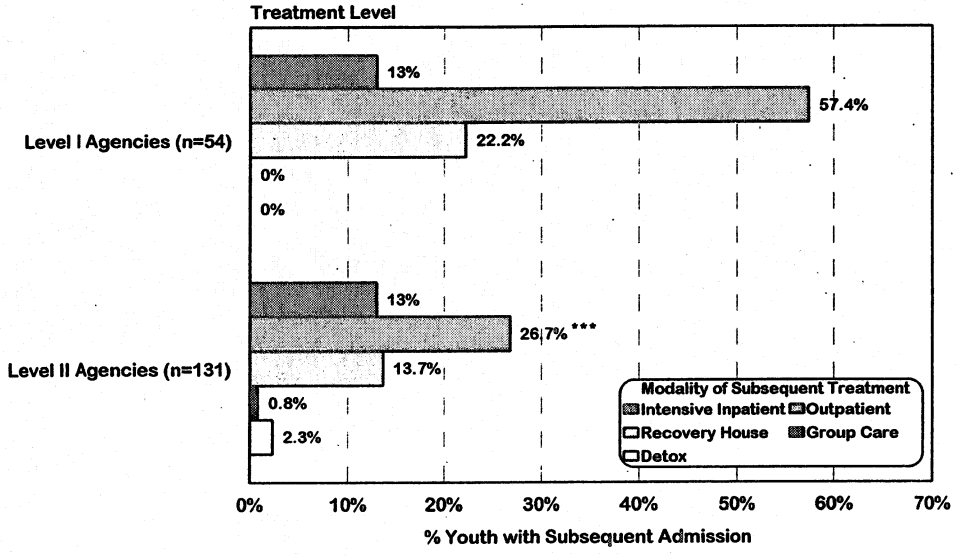
[8] Although six cases had no discharge data for the index admission entered into the TARGET database (as of our search date of May 1, 1997), we included them in our search for subsequent admissions (and have included them in this portion of our analysis) due to our suspicion that these youth had in fact been discharged and discharge data were never sent to DASA. In support of this decision, it can be noted that (1) all six youth had entered treatment no later than mid-December 1996 (well before the data cutoff date), and (2) one of the youth did in fact have a subsequent admission recorded in TARGET.

Figure 1
Percentage of Publicly-Funded Youth with Subsequent Admissions (by Treatment Level)



Statistical Significance of Differences Between Treatment Levels: * = p <.05 ** = p <.01 *** = p <.001.
Based on sample of youth admitted between 6/15/96 and 12/31/96.

Figure 2
Percentage of Publicly-Funded Youth with Subsequent Admissions (by Treatment Level and Modality of Subsequent Treatment)



Statistical Significance of Differences Between Treatment Levels: * = p <.05 ** = p <.01 *** = p <.001.
Based on sample of youth admitted between 6/15/96 and 12/31/96.
"Outpatient" treatment includes "intensive outpatient" treatment.
Note: Modality-specific percentages might exceed overall percentages of youth with subsequent admissions due to nonexclusive categories.

Table 5 (p. 17) provides additional findings on subsequent treatment admissions, including combinations of treatment modalities of subsequent admissions (Table B-6, in Appendix B, provides such findings by treatment agency). Findings are presented in terms of a percentage (percentage of youth with a subsequent admission) and a rate (number of subsequent admissions per 10 clients).

- Youth in Level I programs were not only more likely to have subsequent admissions (as already presented in Figure 1), they also had on average a larger number of subsequent admissions than Level II youth.
  - Level I youth had over 12 subsequent admissions per 10 clients, compared with fewer than 7 subsequent admissions per 10 clients among Level II youth.
- Most youth who had subsequent admissions received a single form of treatment.
  - Of the 98 youth who had at least one subsequent admission, 76 (78%) received only one modality of subsequent treatment (most likely, outpatient). Among the other 22 youth, the most common combination of subsequent treatment modalities was outpatient and recovery house.

Among youth who obtained subsequent treatment, youth in Level I programs obtained subsequent treatment more quickly than Level II youth.

- Among youth in the recruited sample who did obtain subsequent treatment, the average (mean) time between discharge and the immediate subsequent admission was 16 days among Level I youth and 32 days among Level II youth.[9] (Table B-7, in Appendix B, provides these distributions by treatment level.)

Discussion of Findings on Subsequent Treatment

One notable finding regarding subsequent treatment was that Level I youth were more likely to have a subsequent admission, and to have on average more subsequent admissions, than Level II youth. One plausible explanation for this difference is that the "window" periods of time in which subsequent admissions (and their entry into TARGET) were possible (i.e., the length of time between a discharge date and the date on which we collected TARGET data) might vary across treatment level. More precisely, Level I youth might have more subsequent admissions than Level II youth because Level I youth spent less time in treatment and consequently had more time in which to be re-admitted to subsequent treatment prior to our data cutoff date.

However, examination of the "window" periods across agencies did not support this argument. As noted earlier, the average (mean) window periods were remarkably similar across treatment level: 196 days for Level I youth and 197 days for Level II youth), and almost all of the youth had a reasonable gap of time (at least 90 days) in which to be re-admitted to treatment.

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[9] This sizable intergroup difference was not quite statistically-significant at the .05 level (p = . .0574), due primarily to skewness in the distributions (i.e., high proportions of youth with little time between discharge and subsequent admission).

Table 5. Subsequent Admissions Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Treatment Level and Modality of Subsequent Treatment)

Agency (# Admissions)	All subsequent admissions		# Clients with particular combinations of subsequent admissions (% of clients)							
	# Subseq. admissions (# per 10 clients)	# Clients with subseq. admission (% of clients)	Intensive Inpatient (II) ONLY	Outpatient (OP) ONLY [a]	Recovery House (RH) ONLY [b]	II and OP ONLY	II and RH ONLY	OP and RH ONLY	II and OP and RH	Detox ONLY
Level I Agencies (n=54)	66 (12.2)	39 (72.2%)	1 (1.9%)	22 (40.7%)	7 (13.0%)	4 (7.4%)	0 (0.0%)	3 (5.6%)	2 (3.7%)	0 (0.0%)
Level II Agencies (n=131)	90 (6.87) ***	59 (45.0%) ***	11 (8.4%) *	24 (18.3%) **	11 (8.4%)	5 (3.8%)	1 (0.8%)	6 (4.6%)	0 (0.0%)	1 (0.8%)

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

[a] "Outpatient" admissions include "intensive outpatient" admissions.
[b] Includes one client with intensive inpatient and detox subsequent admissions.
[c] Includes one client with outpatient and group care subsequent admissions.
[d] Includes one client with outpatient and detox subsequent admissions.

Another plausible explanation for the difference in subsequent admissions across treatment level is that since Level I youth were more likely to complete their treatment, they were more likely to seek additional treatment as part of a continuum of care. Further examination of the data largely supports this argument.

Analysis of the rates and types of subsequent treatment by treatment completion status and treatment level suggests that the tendency for Level I youth to have more subsequent treatment is due in part to the fact that Level I youth were more likely to complete their treatment, and thus perhaps more inclined to continue treatment designed to augment their recovery (e.g., outpatient or recovery house services). (In fact, completion of treatment is a prerequisite to recovery house admission.) Table 6 (p. 19) shows some relevant findings:

- Youth who completed treatment were more likely to obtain subsequent treatment than youth who did not complete treatment. This was especially true for services that provide a continuum of care following inpatient treatment.
  - Among youth in the recruited sample, almost two-thirds (65%) of those who completed treatment had subsequent admissions, compared with 43% of non-completers ($p < .01$).
  - Likewise, among Level I youth, treatment completers were more likely to have subsequent admissions (80% of completers vs. 55% of non-completers) ($p < .05$).
  - While there was a sizable difference in the tendency to have subsequent treatment among Level II youth (58% of completers vs. 39% of non-completers), this difference was not statistically-significant, probably due to the low number of cases in the subsample analyzed (most notably, only 19 Level I youth not completing treatment).
  - Almost two-thirds (63%) of the youth who completed treatment had subsequent treatment in outpatient or recovery house settings, compared with 31% of non-completers ($p < .001$).
  - Very few (4%) of the youth who completed treatment had subsequent treatment in intensive inpatient settings, compared with 23% of non-completers ($p < .001$).
  - Consistent with the concept of continuum of care, almost all (97%) of the youth who completed treatment and had subsequent treatment received outpatient or recovery house services as part of their subsequent treatment; 92% received subsequent treatment consisting *solely* of outpatient and/or recovery house services (not shown in table).
- Multivariate regression analysis (which allows simultaneous controlling of conditions) revealed that both treatment level and completion status were significant predictors of youth obtaining a continuum of care (results not shown in table).
  - Controlling for completion status, logistic regression analysis showed that Level I youth were more likely than Level II youth to have subsequent treatment that included outpatient and/or recovery house services ($p < .01$). They were also more likely to have subsequent treatment that consisted *solely* of outpatient and/or recovery house services ($p < .001$).
  - Controlling for treatment level, logistic regression analysis showed that youth who completed treatment were more likely than non-completers to have subsequent treatment consisting solely of outpatient and/or recovery house services ($p < .001$). They were also more likely to have subsequent treatment that consisted *solely* of outpatient and/or recovery house services ($p < .001$).

Table 6. Subsequent Admissions Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Completion Status, Treatment Level and Modality of Subsequent Treatment)

	Completed Treatment (n=91)	Did Not Complete Treatment (n=88)	Treatment Completers		Treatment Non-Completers	
			Level I Agencies (n=35)	Level II Agencies (n=56)	Level I Agencies (n=19)	Level II Agencies (n=69)
Had subsequent admission	59 (64.8%)	38 (43.2%) **	28 (80.0%)	31 (55.4%) *	11 (57.9%)	27 (39.1%)
• Includes Intensive Inpatient	4 (4.4%)	20 (22.7%) ***	2 (5.7%)	2 (3.6%)	5 (26.3%)	15 (21.7%)
• Includes Outpatient [a]	38 (41.8%)	27 (30.7%)	21 (60.0%)	17 (30.4%) **	10 (52.6%)	17 (24.6%) *
• Includes Recovery House	29 (31.9%)	1 (1.1%) ***	11 (31.4%)	18 (32.1%)	1 (5.3%)	0 (0.0%)
• Includes Outpatient [a] and/or Recovery House	57 (62.6%)	27 (30.7%) ***	28 (80.0%)	29 (51.8%) **	10 (52.6%)	17 (24.6%) *
• Includes Group Care	0 (0.0%)	1 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.4%)
• Includes Detox	2 (2.2%)	1 (1.1%)	0 (0.0%)	2 (3.6%)	0 (0.0%)	1 (1.4%)

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

[a] "Outpatient" admissions include "intensive outpatient" admissions.
Note: Modality-specific percentages might exceed overall percentages due to nonexclusive categories.

REFERENCES

Brent L. Baxter and Peggy Peterson 1996. *Becca Bill Program Evaluation: Youth Chemical Dependency Residential Treatment Programs.* Seattle, Washington: Alcohol and Drug Abuse Institute Technical Report 96-03.

DASA, 1996 (October). *Directory of Certified Chemical Dependency Treatment Services in Washington State*, Appendix M (Adolescent Resource Guide).

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APPENDIX A: ADOLESCENT TREATMENT MODALITIES

Adolescent Residential (Intensive Inpatient) Treatment
Provided by "a DASA certified and state licensed residential facility which is voluntary, alcohol and drug free, designed for youth, and supports abstinence from alcohol and other drugs. Family and significant other treatment is included, as well as relapse and long term recovery education and counseling. Depending upon the level of care...more intensive therapeutic interventions and services may be provided by individual programs."

Adolescent Outpatient Treatment
"A state certified non-residential program which provides chemical dependency assessments and an alcohol/drug free counseling program for adolescents and young adults ages 10 through 20."

Youth Recovery House
"Youth appropriate for this service include: Those youth ages 13 through 17 who have completed residential chemical dependency treatment and who cannot immediately live with their legal guardians, parents, foster parents, or relatives, or other out of home placement...The program will provide adequate structure and supervision, continued treatment emphasis on recovery and abstinence from alcohol and other drugs, and improvement of living skills, including education and employment skills...The recovery house program will be an extension of and transition from residential treatment."

Youth Group Care Enhancement Program
"DASA contracts with adolescent alcohol and drug treatment agencies to outstation certified counselors in residential agencies serving youth who are placed by the child welfare, juvenile justice, and mental health systems. The goals of the program are to deliver chemical dependency treatment and prevention services at facilities already housing youth and to integrate those services in the overall treatment culture of each facility."

Youth Detoxification / Crisis Stabilization Services
Designed to "provide a safe, temporary, protective environment for at-risk/runaway youth who are experiencing harmful effects of intoxication and/or withdrawal from alcohol and other drugs, in conjunction with emotional and behavioral crisis, including co-existing or undetermined mental health symptomology."

Source: DASA, 1996 (October). *Directory of Certified Chemical Dependency Treatment Services in Washington State*, Appendix M (Adolescent Resource Guide).

APPENDIX B: SUPPLEMENTARY TABLES/FIGURES (AGENCY-SPECIFIC FINDINGS)

Table B-1. Demographic Characteristics Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level and Agency)

			Level I Agencies		Level II Agencies			
CHARACTERISTIC	Level I Agencies (n=587)	Level II Agencies (n=703)	Agency I-A (n=185)	Agency I-B (n=402)	Agency II-A (n=215)	Agency II-B (n=207)	Agency II-C (n=104)	Agency II-D (n=177)
Age								
• Mean	15.2	15.3	15.3	15.2	15.3	15.2	15.7	15.2
• Median	15	15	15	15	16	15	16	15
• Range	11 - 17	11 - 17	11 - 17	11 - 17	11 - 17	12 - 17	14 - 17	12 - 17
Gender								
• Female	264 (45.0%)	293 (41.7%)	74 (40.0%)	190 (47.3%)	91 (42.3%)	113 (54.6%)	0 (0.0%)	89 (50.3%)
• Male	323 (55.0%)	410 (58.3%)	111 (60.0%)	212 (52.7%)	124 (57.7%)	94 (45.4%)	104 (100.0%)	88 (49.7%)
Race/Ethnicity								
• White, not Hispanic	439 (74.8%)	513 (73.0%)	151 (81.6%)	288 (71.6%)	167 (77.7%)	136 (65.7%)	67 (64.4%)	143 (80.8%)
• African-American / Black, not Hispanic	19 (3.2%)	23 (3.3%)	6 (3.2%)	13 (3.2%)	9 (4.2%)	9 (4.3%)	3 (2.9%)	2 (1.1%)
• Native American / Alaskan Native	64 (10.9%)	72 (10.2%)	12 (6.5%)	52 (12.9%)	15 (7.0%)	28 (13.5%)	14 (13.5%)	15 (8.5%)
• Hispanic	55 (9.7%)	68 (9.7%)	10 (5.4%)	45 (11.2%)	14 (6.5%)	22 (10.6%)	18 (17.3%)	14 (7.9%)
• Asian / Pacific Islander	3 (0.5%)	15 (2.1%) **	1 (0.5%)	2 (0.5%)	6 (2.8%)	6 (2.9%)	2 (1.9%)	1 (0.6%)
• Other race	6 (1.0%)	7 (1.0%)	5 (2.7%)	1 (0.2%)	4 (1.9%)	2 (1.0%)	0 (0.0%)	1 (0.6%)
• Unknown / Refused to answer	1 (0.2%)	5 (0.7%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	4 (1.9%)	0 (0.0%)	1 (0.6%)

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

Table B-2. Discharge Type Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level and Agency)

			Level I Agencies		Level II Agencies			
DISCHARGE TYPE	Level I Agencies (n=587)	Level II Agencies (n=703)	Agency I-A (n=185)	Agency I-B (n=402)	Agency II-A (n=215)	Agency II-B (n=207)	Agency II-C (n=104)	Agency II-D (n=177)
Discharge Type								
• Completed treatment	382 (65.1%)	300 (42.7%) ***	149 (80.5%)	233 (58.0%)	91 (42.3%)	58 (28.0%)	62 (59.6%)	89 (50.3%)
• Withdrew against provider advice	64 (10.9%)	140 (19.9%) ***	21 (11.4%)	43 (10.7%)	52 (24.2%)	39 (18.8%)	10 (9.6%)	39 (22.0%)
• Withdrew with provider advice	135 (23.0%)	38 (5.4%) ***	11 (5.9%)	124 (30.8%)	0 (0.0%)	15 (7.2%)	1 (1.0%)	22 (12.4%)
• Rule violation / Non-compliance	3 (0.5%)	155 (22.0%) ***	1 (0.5%)	2 (0.5%)	67 (31.2%)	56 (27.1%)	12 (11.5%)	20 (11.3%)
• No contact / Treatment aborted	0 (0.0%)	37 (5.3%) ***	0 (0.0%)	0 (0.0%)	0 (0.0%)	32 (15.5%)	4 (3.8%)	1 (0.6%)
• Incarcerated	0 (0.0%)	24 (3.4%) ***	0 (0.0%)	0 (0.0%)	3 (1.4%)	3 (1.4%)	14 (13.5%)	4 (2.3%)
• Transferred to different provider	3 (0.5%)	8 (1.1%)	3 (1.6%)	0 (0.0%)	2 (0.9%)	3 (1.4%)	1 (1.0%)	2 (1.1%)
• Other (unspecified)	0 (0.0%)	1 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.5%)	0 (0.0%)	0 (0.0%)

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

Table B-3a. Length of Time in Treatment Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level and Agency)

All Youth

			Level I Agencies		Level II Agencies			
TIME IN TREATMENT	Level I Agencies (n=587)	Level II Agencies (n=703)	Agency I-A (n=185)	Agency I-B (n=402)	Agency II-A (n=215)	Agency II-B (n=207)	Agency II-C (n=104)	Agency II-D (n=177)
Time in Treatment (# Days)								
• Mean	23.9	34.5 ***	32.3	20.0	42.0	34.2	50.1	16.4
• Median	28	29	35	28	43	29	59	16
• Range	1 - 58	1 - 119	1 - 53	1 - 58	1 - 99	1 - 97	4 - 119	1 - 56
Distribution of Length of Tx								
• 1 - 15 days	152 (25.9%)	207 (29.4%)	21 (11.4%)	131 (32.6%)	40 (18.6%)	64 (30.9%)	18 (17.3%)	85 (48.0%)
• 16 - 30 days	274 (46.7%)	167 (23.8%)	13 (7.0%)	261 (64.9%)	38 (17.7%)	42 (20.3%)	8 (7.7%)	79 (44.6%)
• 31 - 45 days	156 (26.6%)	80 (11.4%)	147 (79.5%)	9 (2.2%)	33 (15.3%)	27 (13.0%)	8 (7.7%)	12 (6.8%)
• 46 - 60 days	5 (0.9%)	117 (16.6%)	4 (2.2%)	1 (0.2%)	40 (18.6%)	44 (21.3%)	32 (30.8%)	1 (0.6%)
• 61 or more days	0 (0.0%)	132 (18.8%)	0 (0.0%)	0 (0.0%)	64 (29.8%)	30 (14.5%)	38 (36.5%)	0 (0.0%)

Statistical Significance of Differences Between Treatment Levels (means only):
* = p <.05 ** = p <.01 *** = p <.001

Table B-3b. Length of Time in Treatment Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level, Agency and Completion Status) *(page 1 of 2)*

Treatment Completers

			Level I Agencies		Level II Agencies			
TIME IN TREATMENT	Level I Agencies (n=382)	Level II Agencies (n=300)	Agency I-A (n=149)	Agency I-B (n=233)	Agency II-A (n=91)	Agency II-B (n=58)	Agency II-C (n=62)	Agency II-D (n=89)
Time in Tx (# Days) Among Youth Completing Tx								
• Mean	31.5	51.5 ***	36.5	28.4	63.3	63.0	63.9	23.3
• Median	28	59	35	28	61	60	61	23
• Range	12 - 58	4 - 102	12 - 53	25 - 58	20 - 99	43 - 97	29 - 102	4 - 56
Distribution of Length of Tx								
• 1 - 15 days	1 (0.3%)	15 (5.0%)	1 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	15 (16.9%)
• 16 - 30 days	225 (58.9%)	63 (21.0%)	2 (1.3%)	223 (95.7%)	1 (1.1%)	0 (0.0%)	1 (1.6%)	61 (68.5%)
• 31 - 45 days	151 (39.5%)	18 (6.0%)	142 (95.3%)	9 (3.9%)	3 (3.3%)	1 (1.7%)	2 (3.2%)	12 (13.5%)
• 46 - 60 days	5 (1.3%)	88 (29.3%)	4 (2.7%)	1 (0.4%)	31 (34.1%)	29 (50.0%)	27 (43.5%)	1 (1.1%)
• 61 or more days	0 (0.0%)	116 (38.7%)	0 (0.0%)	0 (0.0%)	56 (61.5%)	28 (48.3%)	32 (51.6%)	0 (0.0%)

Statistical Significance of Differences Between Treatment Levels (means only):
* = p <.05 ** = p <.01 *** = p <.001

Table B-3b. Length of Time in Treatment Among Publicly-Funded Youth Admitted and Discharged Between 7/1/95 and 4/15/97 (by Treatment Level, Agency and Completion Status) *(page 2 of 2)*

Treatment Non-completers

			Level I Agencies		Level II Agencies			
TIME IN TREATMENT	Level I Agencies (n=205)	Level II Agencies (n=403)	Agency I-A (n=36	Agency I-B (n=169)	Agency II-A (n=124)	Agency II-B (n=149)	Agency II-C (n=42)	Agency II-D (n=88)
Time in Tx (# Days) Among Youth Not Completing Tx								
• Mean	9.5	21.8 ***	15.0	8.4	26.4	23.0	29.7	9.5
• Median	7	17	10.5	6	23.5	19	21	7
• Range	1 - 39	1 - 119	1 - 39	1 - 28	1 - 91	1 - 64	4 - 119	1 - 27
Distribution of Length of Tx								
• 1 - 15 days	151 (74.0%)	192 (47.9%)	20 (55.6%)	131 (77.5%)	40 (32.3%)	64 (43.0%)	18 (42.9%)	70 (79.5%)
• 16 - 30 days	49 (23.9%)	104 (25.9%)	11 (30.6%)	38 (22.5%)	37 (29.8%)	42 (28.2%)	7 (16.7%)	18 (20.5%)
• 31 - 45 days	5 (2.5%)	62 (15.4%)	5 (13.9%)	0 (0.0%)	30 (24.2%)	26 (17.4%)	6 (14.3%)	0 (0.0%)
• 46 - 60 days	0 (0.0%)	29 (7.2%)	0 (0.0%)	0 (0.0%)	9 (7.3%)	15 (10.1%)	5 (11.9%)	0 (0.0%)
• 61 or more days	0 (0.0%)	16 (4.0%)	0 (0.0%)	0 (0.0%)	8 (6.5%)	2 (1.3%)	6 (14.3%)	0 (0.0%)

Statistical Significance of Differences Between Treatment Levels (means only):
* = p <.05 ** = p <.01 *** = p <.001

Table B-4. Discharge Type Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Treatment Level and Agency)

			Level I Agencies		Level II Agencies			
DISCHARGE TYPE	Level I Agencies (n=54)	Level II Agencies (n=125)	Agency I-A (n=7)	Agency I-B (n=47)	Agency II-A (n=35)	Agency II-B (n=34)	Agency II-C (n=25)	Agency II-D (n=31)
Discharge Type								
• Completed treatment	35 (64.8%)	56 (44.8%) *	4 (57.1%)	31 (66.0%)	13 (37.1%)	11 (32.4%)	14 (56.0%)	18 (58.1%)
• Withdrew against provider advice	7 (13.0%)	22 (17.6%)	2 (28.6%)	5 (10.6%)	8 (22.9%)	7 (20.6%)	5 (20.0%)	2 (6.5%)
• Withdrew with provider advice	12 (22.2%)	10 (8.0%) *	1 (14.3%)	11 (23.4%)	0 (0.0%)	3 (8.8%)	0 (0.0%)	7 (22.6%)
• Rule violation / Non-compliance	0 (0.0%)	29 (23.2%) ***	0 (0.0%)	0 (0.0%)	13 (37.1%)	9 (26.5%)	4 (16.0%)	3 (9.7%)
• No contact / Treatment aborted	0 (0.0%)	3 (2.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (8.8%)	0 (0.0%)	0 (0.0%)
• Incarcerated	0 (0.0%)	4 (3.2%) *	0 (0.0%)	0 (0.0%)	1 (2.9%)	0 (0.0%)	2 (8.0%)	1 (3.2%)
• Transferred to different provider	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
• Inappropriate admission	0 (0.0%)	1 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.9%)	0 (0.0%)	0 (0.0%)
• Other (unspecified)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Admissions without Discharge as of Data Cutoff Date (5/1/97)	0	6	0	0	0	2	3	1

Statistical Significance of Differences Between Treatment Levels:
* = p <.05 ** = p <.01 *** = p <.001

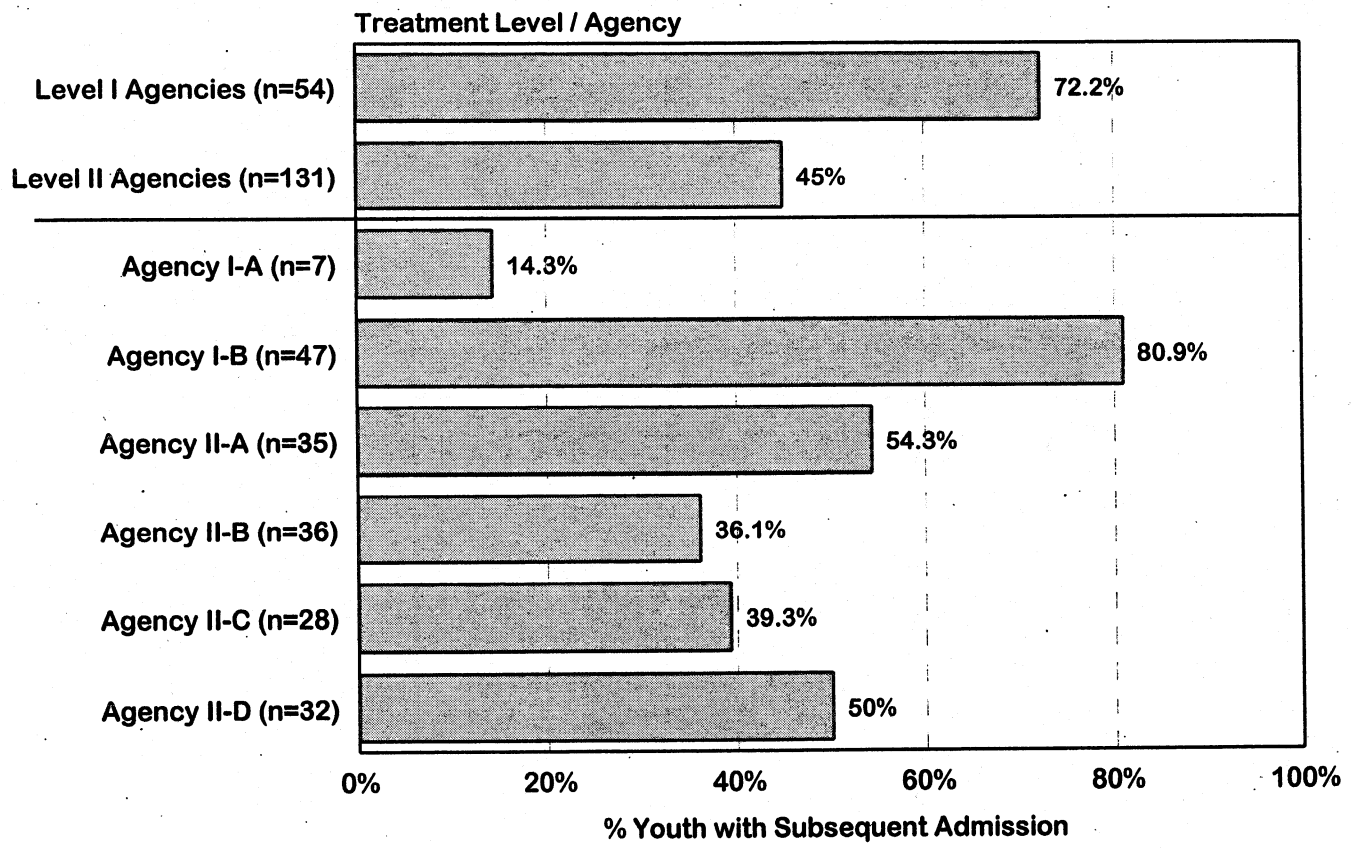
Table B-5. Length of Time in Treatment for Index Admission Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Treatment Level, Agency and Completion Status)

			Level I Agencies		Level II Agencies			
TIME IN TREATMENT	Level I Agencies (n=54)	Level II Agencies (n=125)	Agency I-A (n=7)	Agency I-B (n=47)	Agency II-A (n=35)	Agency II-B (n=34)	Agency II-C (n=25)	Agency II-D (n=31)
Time in Treatment (# Days)								
• Mean	21.7	37.1 ***	24.3	21.3	41.9	34.6	59.7	16.4
• Median	28	26	27	28	41	27	60	19
• Range	1 - 42	1 - 187	1 - 42	1 - 28	3 - 93	4 - 83	10 - 187	1 - 31
Time in Treatment (# Days) Among Youth Completing Treatment	(n=35)	(n=56)	(n=4)	(n=31)	(n=13)	(n=11)	(n=14)	(n=18)
• Mean	28.7	53.7 ***	34.8	27.9	67.8	62.9	75.7	20.7
• Median	28	60.5	35	28	65	64	63	21
• Range	25 - 42	10 - 187	27 - 42	25 - 28	52 - 93	43 - 83	29 - 187	10 - 31
Time in Treatment (# Days) Among Youth Not Completing Treatment	(n=19)	(n=69)	(n=3)	(n=16)	(n=22)	(n=23)	(n=11)	(n=13)
• Mean	8.8	23.7 ***	10.0	8.5	26.6	21.0	39.4	10.4
• Median	7	19	10	6.5	23	19	35	9
• Range	1 - 28	1 - 119	1 - 20	1 - 28	3 - 77	4 - 62	10 -119	1 - 26

Statistical Significance of Differences Between Treatment Levels (means only):
* = p <.05 ** = p <.01 *** = p <.001

Figure B-1

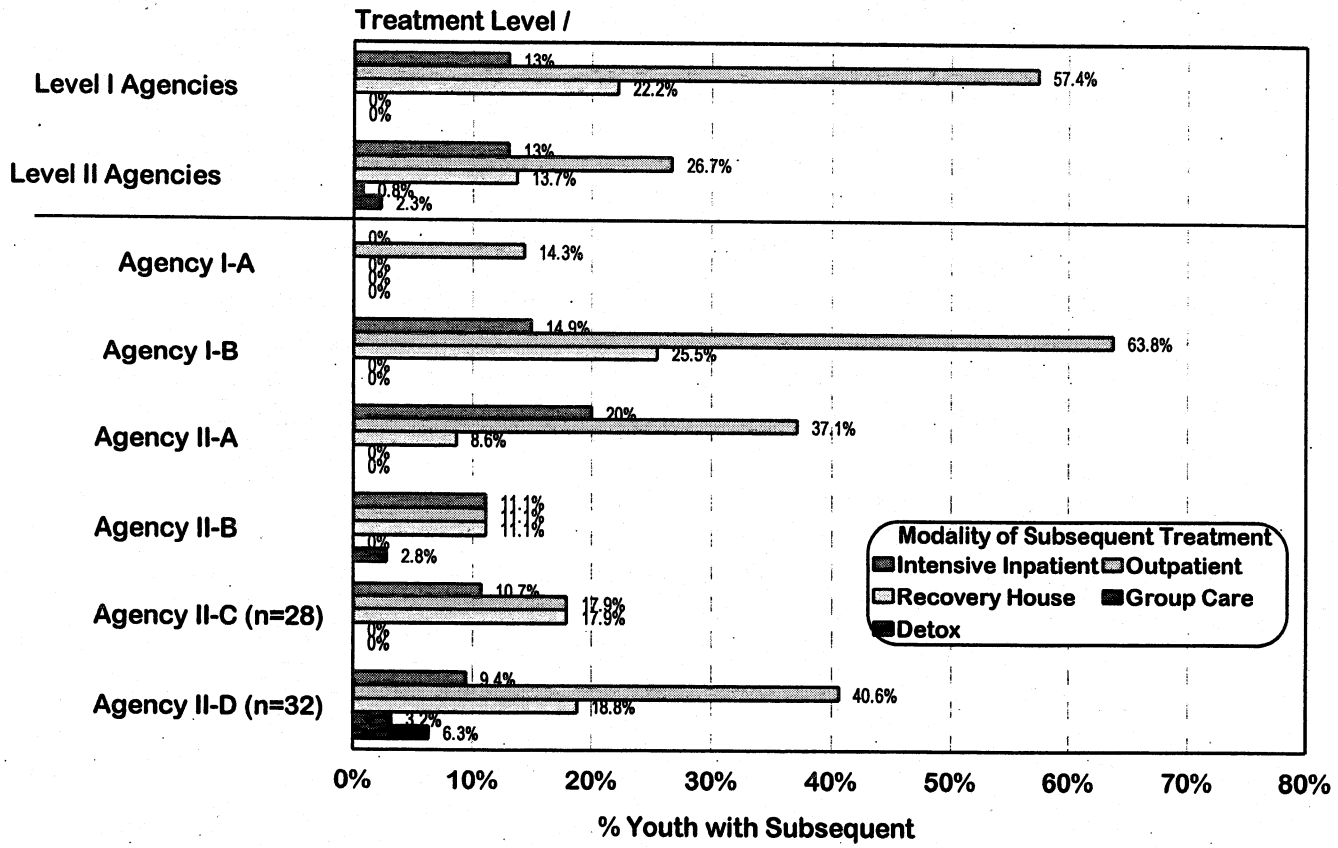
Percentage of Publicly-Funded Youth with Subsequent Admissions (by Treatment Level and Agency)



Based on sample of youth admitted between 6/15/96 and 12/31/96.

Figure B-2

Percentage of Publicly-Funded Youth with Subsequent Admissions (by Treatment Level, Agency and Modality of Subsequent Treatment)



Based on sample of youth admitted between 6/15/96 and 12/31/96.
"Outpatient" treatment includes "intensive outpatient" treatment.
Note: Modality-specific percentages might exceed overall percentages of youth with subsequent admissions due to nonexclusive categories.

Table B-6. Subsequent Admissions Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 (by Treatment Level, Agency and Modality of Subsequent Treatment)

Agency (# Admissions)	All subsequent admissions		# Clients with particular combinations of subsequent admissions (% of clients)							
	# Subseq. admissions (# per 10 clients)	# Clients with subseq. admission (% of clients)	Intensive Inpatient (II) ONLY	Outpatient (OP) ONLY [a]	Recovery House (RH) ONLY [b]	II and OP ONLY	II and RH ONLY	OP and RH ONLY	II and OP and RH	Detox ONLY
• Agency I-A (n=7)	1 (1.43)	1 (14.3%)	0 (0.0%)	1 (14.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
• Agency I-B (n=47)	65 (13.83)	38 (80.9%)	1 (2.1%)	21 (44.7%)	7 (14.9%)	4 (8.5%)	0 (0.0%)	3 (6.4%)	2 (4.3%)	0 (0.0%)
• Agency II-A (n=35)	26 (7.43)	19 (54.3%)	4 (11.4%)	9 25.7%)	2 (5.7%)	3 (8.6%)	0 (0.0%)	1 (2.9%)	0 (0.0%)	0 (0.0%)
• Agency II-B (n=36)	15 (4.16)	13 (36.1%)	4 (11.1%)	4 (11.1%)	4 (11.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.8%)
• Agency II-C (n=28)	14 (5.00)	11 (39.3%)	2 (7.1%)	4 (14.3%)	3 (10.7%)	0 (0.0%)	1 (3.6%)	1 (3.6%)	0 (0.0%)	0 (0.0%)
• Agency II-D (n=32)	35 (9.14)	16 (50.0%)	1 [b] (3.1%)	7 [cd] (21.9%)	2 (6.3%)	2 (6.3%)	0 (0.0%)	4 (12.5%)	0 (0.0%)	0 (0.0%)
Level I Agencies (n=54)	66 (12.2)	39 (72.2%)	1 (1.9%)	22 (40.7%)	7 (13.0%)	4 (7.4%)	0 (0.0%)	3 (5.6%)	2 (3.7%)	0 (0.0%)
Level II Agencies (n=131)	90 (6.87)	59 (45.0%)	11 (8.4%)	24 (18.3%)	11 (8.4%)	5 (3.8%)	1 (0.8%)	6 (4.6%)	0 (0.0%)	1 (0.8%)
Total (n=185)	156 (8.43)	98 (53.0%)	12 (6.5%)	46 (24.9%)	18 (9.7%)	9 (4.9%)	1 (0.5%)	9 (4.9%)	2 (1.1%)	1 (0.5%)

[a] "Outpatient" admissions include "intensive outpatient" admissions.
[b] Includes one client with intensive inpatient and detox subsequent admissions.
[c] Includes one client with outpatient and group care subsequent admissions.
[d] Includes one client with outpatient and detox subsequent admissions.

Table B-7. Length of Time Between Treatment Discharge and Subsequent Treatment Admission Among Sample of Publicly-Funded Youth Admitted Between 6/15/96 and 12/31/96 and Admitted to Subsequent Treatment (by Treatment Level)

TIME IN TREATMENT	Level I Agencies (n=39)	Level II Agencies (n=58) [1]
Time Between Treatments (# Days)		
• Mean	16.1	31.6
• Median	0	18
• Range	0 - 144	0 - 201
Distribution of Length of Time Between Treatments		
• 0 days	21 (53.8%)	10 (17.2%)
• 1 - 7 days	8 (20.5%)	13 (22.4%)
• 8 - 21 days	3 (7.7%)	9 (15.5%)
• 22 - 60 days	3 (7.7%)	16 (27.6%)
• 61 or more days	4 (10.3%)	10 (17.2%)

1 One (1) Level II youth had a subsequent admission but no initial discharge date listed in TARGET, and thus was excluded from this analysis.

NOTE: Difference between means, while sizable, is not statistically-significant (p = .0574), due primarily to skewness in the distributions (i.e., high proportions of youth with little time between discharge and subsequent admission.